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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

NOV - 9 1992  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of ) Gen Docket No. 90-314  
 ) ET Docket No. 92-100  
Amendment of the Commission's ) RM-7140, RM-7175, RM-7617  
Rules to Establish New Personal ) RM-7618, RM-7760, RM-7782  
Communications Services ) RM-7860, RM-7977, RM-7978  
 ) RM-7979, RM-7980

**ORIGINAL**  
**FILE**

**COMMENTS OF THE**  
**NATIONAL ASSOCIATION OF BROADCASTERS**

By its Notice of Proposed Rule Making and Tentative Decision ("Notice") in the above captioned proceedings,<sup>1</sup> the FCC proposes spectrum allocations for use by personal communications services ("PCS"). For the reasons stated below, the National Association of Broadcasters ("NAB")<sup>2</sup> reiterates its support for the Commission's decision not to include the 1.99-2.11 GHz broadcast auxiliary band in those frequencies designated for re-allocation or spectrum sharing to accommodate PCS. NAB applauds the Commission's recognition of the vital public interest to be served by preserving these frequencies for electronic news

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<sup>1</sup> See, Notice of Proposed Rule Making and Tentative Decision in Gen. Docket No. 90-314 and ET Docket No. 92-100, 7 FCC Rcd 5676 (1992).

<sup>2</sup> NAB is a nonprofit, incorporated association of radio and television broadcast stations and networks. NAB serves and represents America's radio and television stations and all the major broadcast networks. As noted below, NAB and several other allied parties have participated in earlier phases of Gen. Docket No. 90-314.

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gathering ("ENG") and mobile video transmissions by broadcast television stations.

**I. MOBILE NEWS GATHERING USES OF THE 1.99-2.11 GHZ BAND SERVE A VITAL PUBLIC INTEREST.**

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Use of the 1.99-2.11 GHz band for news gathering purposes is vital to the timely dissemination of information to the public. Broadcasters and others use these frequencies to provide live, mobile coverage of news and sports events, for studio-transmitter links and fixed retransmittal links. Today's information-age public demands this up-to-the-minute, on-location coverage.

Unencumbered transmissions of mobile video ENG operations play an integral role in providing accurate, up-to-date information to broadcast and other mass media outlets. The public depends on ENG operations for timely, local, regional and nation-wide coverage. Vital, on-location coverage of the 1992 presidential elections, recent national disasters such as Hurricane Andrew, civil unrest as witnessed in the Los Angeles riots, and major sporting events such as the Olympics, would not have been possible without ENG operations.

**II. BROADCAST ENG OPERATIONS FULLY UTILIZE THE 1.99-2.11 BAND.**

Current ENG demand on the 1.99-2.11 GHz band fully occupies the spectrum available. In fact, in many markets, where the number of ENG operations exceeds the seven channels available on the band, there is significant congestion. In these markets,

considerable cooperation and coordination among ENG users is necessary to equitably serve each user's needs.

Broadcast ENG and mobile video operations make full, efficient use of the spectrum capabilities of the 1.99-2.11 GHz band, with most broadcast ENG transmissions using frequency modulation with bandwidths of 18 MHz.<sup>3</sup> Moreover, coordinating efforts among users, such as "pooling" arrangements, are often necessary to achieve maximum utilization of the limited available spectrum.<sup>4</sup>

Such cooperative arrangements enable various ENG programmers, who require different spectrum at different times, to have constant access to the available spectrum. This accommodation among ENG users would be impossible if the limited available spectrum were under constant use by a select few broadcasters or subject to interference from fixed links or other spectrum sharing media.

### **III. SPECTRUM REALLOCATION AND SHARING ALTERNATIVES ARE NOT FEASIBLE FOR MOBILE ENG OPERATIONS.**

In comments filed earlier in this proceeding and in a related FCC proceeding, NAB underscored the substantial problems which would result from various spectrum allocation alternatives

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<sup>3</sup> See, Joint Reply Comments of NAB, Radio-Television News Directors Association ("RTNDA"), The Cable-Satellite Public Affairs Network ("C-SPAN"), The Association for Maximum Service Television, Inc. ("MSTV"), and Turner Broadcasting System, Inc. ("Turner") in ET Docket 92-9, submitted July 8, 1992 at 7.

<sup>4</sup> See, Comments of CBS in ET Docket No. 92-9, submitted June 1, 1992, at 4. and Joint Reply Comments, supra note 3.

proposed for ENG and mobile video operations.<sup>5</sup> Specifically, NAB raised issues significant concerns regarding spectrum sharing, spectrum reallocation and satellite news gathering ("SNG").

**A. Spectrum Sharing of the 1.99-2.11 GHz Band Is an Impracticable Means of Accommodating PCS.**

Spectrum sharing of the 1.99-2.11 GHz band is not a feasible means of accommodating the needs of PCS or other emerging telecommunications technologies. To date, current spectrum sharing models do not account for the numerous variables, unique to mobile ENG operations.<sup>6</sup> Current spectrum sharing models pose a real threat of interference with mobile video operations, thereby, threatening considerable harm to the public interests these ENG operations serve.

**B. Spectrum Reallocation Is Not a Feasible Alternative for Current ENG Operations.**

As discussed at length earlier comments in this proceeding, relocating ENG and mobile video operations to alternate bands is not a viable alternative to use of the 1.99-2.11 GHz band. Current ENG spectrum sustains variable mobile microwave broadcasting requirements not available at higher frequencies. Low frequency spectrum has the unique capability of

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<sup>5</sup> See generally, Joint Comments of NAB, RTNDA, and C-SPAN in Gen. Docket No. 90-314, submitted January 9, 1992; Joint Comments of NAB, RTNDA, C-SPAN, MSTV, and Turner in ET Docket No. 92-9, submitted June 8, 1992; and, Joint Reply Comments of NAB, et al. in ET Docket No. 92-9, supra note 3.

<sup>6</sup> See Joint Reply Comments in ET Docket No. 92-9, supra note 3 at 12.

accommodating the varying physical factors peculiar to mobile microwave transmissions.<sup>7</sup> Higher frequency signals have properties which make variable mobile microwave transmissions inefficient, if not physically impossible.<sup>8</sup>

Reallocating ENG operations to alternate frequencies poses the additional problem of substantial interference from fixed links located in the higher spectrum. Most broadcasters have relocated fixed links previously located in the 1.99-2.11 GHz band to the 7 GHz and 13 GHz bands to eliminate interference caused by earlier spectrum sharing practices.<sup>9</sup> Re-locating current ENG operations to these higher frequencies would serve only to re-create interference problems which have already been alleviated. Moreover, in many markets, these alternate spectrum designations are already too crowded by fixed links to accommodate mobile ENG operations.

Cost is a third factor weighing against re-allocating ENG spectrum. Broadcasters have invested substantial time, and money into the purchase of equipment, training of personnel and development of state-of-the-art techniques, such as helicopter and motorbike relay systems, which enable ENG operators to

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<sup>7</sup> See, Joint Comments in Gen. Docket 90-314, supra note 5, submitted January 9, 1992.

<sup>8</sup> Id. at 9.

<sup>9</sup> See Comments of Westinghouse Broadcasting Company in ET Docket No. 92-9, filed June 1, 1992, at 2-3.

facilitate mobile video transmissions under the most seemingly prohibitive conditions.

These techniques, utilizing various antennas and power levels to bounce signals off reflecting objects, can not be employed in higher signal bands. Because the higher bands lack the low frequency characteristics which accommodate the flexibility required for mobile video transmissions, relocation to higher frequencies would prohibit most ENG operations.<sup>10</sup>

**C. Satellite Transmissions Are Not an Alternative to Terrestrial ENG Links.**

Contrary to the contentions of some commenting parties in ET Docket No. 92-9, satellite news gathering ("SNG") is not a viable substitute or replacement for terrestrial ENG operations.<sup>11</sup> Although SNG operations notably enhance mobile video operations, they cannot replace localized ENG operations. Using SNG operations for local newsgathering poses significant physical and logistical barriers which cannot be overcome with current technology.

**V. CONCLUSION**

NAB commends the Commission's decision in the Notice not to include the 1.99-2.11 GHz band among the frequencies designated for possible reallocation or spectrum sharing in order

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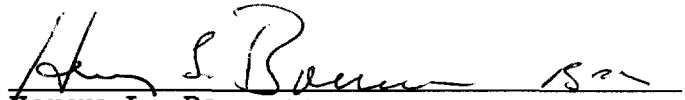
<sup>10</sup> See Joint Comments in Gen. Docket No. 90-314, supra note 5, at 8.

<sup>11</sup> See Joint Reply Comments in ET Docket No. 92-9, supra note 3, at 10; see also Comments of Motorola, Inc. in ET Docket No. 92-9, filed June 8, 1992, at 8.

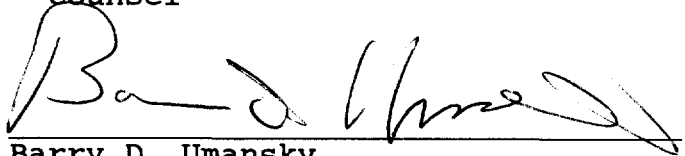
to accommodate PCS. Successful implementation of PCS is not dependent upon reallocation or spectrum sharing of the 1.99-2.11 GHz band. Therefore, NAB respectfully requests, for the reasons stated herein, that the Commission maintain its current exclusion of the 1.99-2.11 GHz spectrum from those frequencies to be reallocated to accommodate PCS.

Respectfully submitted,

NATIONAL ASSOCIATION OF BROADCASTERS  
1771 N Street, N.W.  
Washington, DC 20036



Henry L. Baumann  
Executive Vice President and General  
Counsel



Barry D. Umansky  
Deputy General Counsel

Teresa L. Inscoe  
NAB Legal Intern

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